IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Welch
Application No.: 10/785,434   Art Unit.: 4121
Filed: 2/24/2004   Examiner: Keehn, Richard
For: DISTRIBUTED MONITORING IN A TELECOMMUNICATIONS SYSTEM

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL APPEAL BRIEF

Sir:

       Appellants herewith file this supplemental Appeal Brief in support of their appeal in the above identified matter.

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i.   REAL PARTY IN INTEREST

The real party in interest is Lucent Technologies Inc., which is the assignee of the patent rights in the above-identified matter. The inventor, Arthur Welch, assigned the patent rights to Lucent Technologies Inc., which is recorded at reel/frame 015021/0501.

ii.   RELATED APPEALS AND INTERFERENCES

No other appeals, interferences, or related applications are known to the Appellants, the Appellants' legal representative, or the Assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

iii.   STATUS OF CLAIMS

Claims 1, 5-6, 8-11, 15-16 and 18-20 stand rejected and remain in the application for consideration on appeal. Claims 2-4, 7, 12-14 and 17 are cancelled.

iv.   STATUS OF AMENDMENTS

No amendments have been filed since the response to the Office action mailed April 24, 2009.

v.   SUMMARY OF THE CLAIMED SUBJECT MATTER

The following summarizes the independent claims presently pending:

Independent claim 1 recites a telecommunication system (100) configured to provide distributed system monitoring. See generally, FIG. 1. The telecommunication system includes a control system (110) and a plurality of peer communication devices (101-105). See FIG. 1. Responsive to handling telecommunications data, each peer communication device collects performance data, and transfers the performance data to the control system. See FIG. 2A and pages 4-5, lines 30-4. Responsive to receipt of the performance data from the peer communication devices, the control system processes the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices, and transfers the performance file to each of the peer communication devices. See FIG. 2A and page 5, lines 5-15. Responsive to receipt of the performance file, each of the peer communication devices processes the performance file to compare its performance to the performance of the other peer communication devices to detect a fault. See FIG. 2A and page 5, lines 16-22. Responsive to detection of the fault, at least one of the peer communication devices processes the performance file to identify at least one recovery action, and performs the at least one recovery action to attempt to cure the fault. See FIG. 2B and pages 5-6, lines 23-6.

Independent claim 11 recites a method of operating a telecommunication system to provide distributed system monitoring, where the telecommunication system comprises a plurality of peer communication devices (101-105) coupled to a control system (110). See FIGS. 1 and 2A. The method includes collecting (step 202) performance data in each of the peer communication devices responsive to the peer communication devices handling telecommunications data, and transferring the performance data from each of the peer communication devices to the control system. See FIG. 2A and pages 4-5, lines 30-4. The method further includes processing, in the control system, (step 204) the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices, and transferring the performance file from the control system to each of the peer communication devices. See FIG. 2A and page 5,

lines 5-15. The method further includes processing (step 206) the performance file in each of the peer communication devices to compare its performance to the performance of the other peer communication devices to detect a fault. See FIG. 2A and page 5, lines 16-22. Responsive to detection of the fault, the method further includes processing the performance file to identify at least one recovery action, and performing the at least one recovery action to attempt to cure the fault. See FIG. 2B and pages 5-6, lines 23-6.

vi.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

        The Examiner has rejected claims 1, 5-6, 8-11, 15-16, and 18-20 under 35 USC § 103(a)
as being obvious in view of U.S. Patent 7,203,655 (Herbert), U.S. Patent Application Publication
2003/0083846 (Curtin), and U.S. Patent Application Publication 2005/0086300 (Yeager). The
Appellants ask the Board of Patent Appeals and Interferences (referred to hereinafter as the
Board) to review the rejections set forth by the Examiner.

vii.   ARGUMENT

The Examiner has rejected claim 1 under 35 U.S.C. 103(a) as being obvious in view of Herbert, Curtin, and Yeager. The Appellants disagree.

To paraphrase claim 1, a telecommunication system is disclosed for distributed system monitoring. The system includes peer communication devices that collect performance data responsive to handling telecommunications data, and transfer the performance data to a control system. The control system processes the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices. Each of the peer communication devices then processes the performance file to compare its performance to the performance of the other peer communication devices to detect a fault. Responsive to detection of the fault, one (or more) of the peer communication devices processes the performance file to identify a recovery action, and performs the recovery action to attempt to cure the fault.

The Examiner has rejected claim 1 under 35 USC § 103(a) as being obvious in view of Herbert, Curtin, and Yeager. The Appellants submit that claim 1 is non-obvious in view of the cited art for multiple reasons that are set out below.

Herbert is the primary reference relied on by the Examiner in the rejection. Herbert describes a call center that has agents (i.e., people) to serve calls. The call center includes an automatic call distributor (ACD) 110 and a multimedia server 112 coupled to a plurality of agent workstations 130 that are manned by agents 132. When calls come into the call center, the ACD 110 receives the calls, and routes the calls to the appropriate agent 132 (through the workstation 130). See Herbert, column 4, lines 47-53. The agents 132 serve the calls, and the ACD 110 and the multimedia server 112 periodically report statistic data to a central processing computer 120. See Herbert, column 4, lines 53-56. The statistic data comprises statistics on the agents 132, such as the number of calls handled, the amount of time the agent spends on a call, etc. The central processing computer 120 stores the statistic data on the agents 132, and also calculates performance statistics based on the data. See Herbert, column 4, lines 56-59. The central processing computer 120 includes a performance statistics system (PSS) 128, which provides an interface where the agents 132 and their supervisors may view the performance statistics. See Herbert, column 4, lines 63-67. Each agent 132 can thus see how they are performing in relation to the other agents 132 of the call center.

To summarize, the overall system in Herbert collects performance data for *agents*, and allows the agents to view performance reports. There is no discussion in Herbert about collecting performance data for *communication devices*. Also, there is no discussion in Herbert about a communication device *processing a performance file to detect a fault*, *identifying a recovery action*, and *performing the recovery action to attempt to cure the fault*. Thus, Herbert is severely deficient as the primary reference in the Examiner's rejection.

The Appellants direct the Board to pages 4-5 of the final Office action dated July 14, 2009. This is where the Examiner attempts to relate Herbert to claim 1. Claim 1 recites the limitations of "a plurality of peer communication devices, where each peer communication device, responsive to handling telecommunications data, collects performance data and transfers the performance data to the control system", and "the control system, responsive to receipt of the performance data from the peer communication devices, processes the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices, and transfers the performance file to each of the peer communication devices". The Appellants submit that none of the cited references teach these limitations. In particular, Herbert does not teach peer communication devices that collect performance data and transfer performance data to a control system, and Herbert does not teach a control system that generates a performance file that indicates the performance of each of the peer communication devices, and transfers the performance file to each of the peer communication devices.

In rejecting these limitations of claim 1, the Examiner cites to Herbert even though Herbert clearly does not teach peer communication devices that operate as in claim 1. The Examiner replaced the language "peer communication devices" from claim 1 with "peer", and tries to relate Herbert to the claim 1. For example, on page 4 of the Office action, the Examiner suggests that Herbert teaches "a plurality of peer communication {humans using devices}". The Appellants are not sure what this means, but assume the Examiner is describing the agents in Herbert. Further, the Examiner states that Herbert discloses a control system that "processes the performance data from each of the peer to generate a performance file that indicates the performance of each of the peer, and transfers the performance file to each of the peer". Again, the Applicants are confused by this language. Claim 1 does not refer to a control system that processes performance data from each of "the peer". Claim 1 specifically recites "the control

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system, responsive to receipt of the performance data *from the peer communication devices*, processes the performance data from each of the peer communication devices to generate a performance file *that indicates the performance of each of the peer communication devices*, and transfers the performance file *to each of the peer communication devices*" (emphasis added). The performance data generated in Herbert does not indicate the performance of *peer communication devices*, but instead indicates the performance of the agents. The Applicants concede that Herbert describes generating performance statistics indicating the performance of agents. However, claim 1 specifically recites generating a performance file that indicates the performance of *peer communication devices*.

The Examiner's rejection hinges on the system of Herbert collecting performance data for "peers", which are agents and not devices. The Examiner then combines Herbert with Curtin and Yeager, as these references disclose communication devices. The Examiner's rationale is then essentially that the "peers" in Herbert could be replaced with the "communication devices" of Curtin and Yeager. However, the Examiner's rationale is flawed as Herbert also discloses communication devices, which are the workstations 130 used by the agents. See FIG. 1. Herbert discloses communication devices (i.e., workstations) of the agents, but never discusses collecting performance data *for the workstations*. If Herbert discloses communication devices (i.e., workstations) but does not disclose collecting performance data for the communication devices, then why would one skilled in the art be motivated to combine Curtin and Yeager with Herbert so that the system in Herbert collects performance data for the communication devices? The problem with the Examiner's argument is that Herbert never describes collecting performance data for communication devices, and only describes performance data for agents. Thus, there would be no motivation to collect the performance data of the communication devices of Curtin and Yeager.

During prosecution, the Examiner has continually relied on references that disclose *people* receiving some kind of performance report. For example, one previously cited reference (referred to as "City University") describes how the performance of school counselors will be evaluated. The Applicants do not understand why the Examiner continually relies on how *people* may evaluate their own performance when rejecting claim 1. As a hypothetical, assume that the agents take precautions from catching a cold (i.e., wash hands). According to the rationale of the Examiner, there could never be anything patentable in the agent's workstations

regarding antivirus protection, because if the agents themselves protect against viruses, then this obviously extends to the workstations themselves. The Appellants do not believe that the Examiner can take leaps like this in rejecting claim 1.

Claim 1 describes distributed monitoring, which means that lower-level devices assist in monitoring a telecommunication system, and initiating recovery actions. As a reminder, prior telecommunication systems relied on a *centralized system monitor* to monitor the telecommunication system and initiate recovery actions. Monitoring and recovery was *not* performed in the lower-lever devices. According to claim 1, monitoring and recovery have been moved to the communication devices, which distributes the monitoring. Herbert, City University, or any other similar reference which refers to *people* comparing their performance against the performance of peers is not relevant. As such, the Appellants submit that the Examiner has not properly rejected these limitations of claim 1.

Assuming *arguendo* that the Board agrees that the combination of Herbert, Curtin, and Yeager teach the above limitations of claim 1, the Appellants submit that they do not teach the remaining limitations of claim 1. More particularly, the Appellants submit that the cited art does not teach the following limitation of claim 1: "each of the peer communication devices, responsive to receipt of the performance file, processes the performance file to compare its performance to the performance of the other peer communication devices to detect a fault". Herbert clearly does not describe *peer communication devices* that receive a performance file and compare their performance to the performance of the other peer communication devices to detect a fault. Neither do the other references.

In rejecting this limitation, the Examiner cites to Herbert and suggests that when an agent configures the display of the performance statistics, he/she is comparing their performance to a group to *detect a fault*. See page 5 of the Office action. This rejection is flawed in many ways. First, the Examiner has applied Herbert to claim 1 by removing the term "communication device", and only referring to "peer". Secondly, in claim 1 each peer communication device processes the performance file to *detect a fault*. The agents in Herbert may view performance statistics, but there is no language in Herbert regarding an agent *detecting a fault*. The Examiner may be guessing as to the thoughts of the agent when the agent is viewing the performance statistics (i.e., that they are trying to detect their faults). However, the Applicants submit that this is insufficient for a rejection, and it is irrelevant what an agent thinks when viewing

performance statistics. Herbert does not disclose a *communication device* that detects a fault based on the performance file. Thus, the Examiner has not properly rejected this limitation.

Even further, the Applicants submit that the cited art does not teach the following limitation of claim 1: "responsive to detection of the fault, at least one of the peer communication devices processes the performance file to identify at least one recovery action, and performs the at least one recovery action to attempt to cure the fault". Herbert clearly does not describe a *peer communication device* that processes a performance file to identify a recovery action and perform the recovery action to cure a fault. Neither do the other references.

In rejecting this limitation, the Examiner again cites to Herbert. See page 5 of the Office action. The Examiner cites to column 6, lines 25-35 in Herbert, which discusses a manager being able to configure performance statistics as color coded. For example, if the performance of an agent is below a threshold, then the performance statistics are in one color. If the performance of an agent is above a threshold, then the performance statistics are in another color. Thus, an agent can see if their performance is good or bad based on the color. However, claim 1 is clear that a peer communication device processes the performance file to identify *at least one recovery action*. The Examiner suggests that the recovery action is "goal setting to improve job satisfaction". Again, the Examiner is guessing as to the thoughts of the agent when the agent is viewing the performance statistics, and somehow construes these thoughts to be a "recovery action". The specification defines a recovery action as any measure or measures used to address a fault condition, where a fault is internal to a communication device. See page 5, lines 27-33. Thus, an agent's goal of improving performance in Herbert cannot be construed as a "recovery action" as in claim 1. Based on the above, the Applicants submit that the Examiner has not properly rejected this limitation of claim 1.

The Appellants point out to the Board that one advantage of the system in claim 1 is that the peer communication devices can detect their own internal fault, and initiate a recovery action. The control system does not have to initiate the recovery action on behalf of the peer communication devices. Herbert does not teach this, nor does the combination of Herbert, Curtin, and Yeager. Herbert merely describes that agents can view their performance statistics. Curtin mentions that communication devices may collect performance data, and Yeager mentions that peer devices may communicate. The Appellants ask the Board to recognize that even when combined, these references do not teach distributed monitoring by having peer

communication devices detect faults based on a performance file, and initiate recovery actions to cure the faults.

Based on the above remarks, the Appellants submit that claim 1 is nonobvious in view of the cited art. Similar arguments apply for the other remaining claims.

viii.   CLAIMS APPENDIX

1. (Previously Presented) A telecommunication system configured to provide distributed system monitoring, the telecommunication system comprising:

a control system; and

a plurality of peer communication devices, where each peer communication device, responsive to handling telecommunications data, collects performance data and transfers the performance data to the control system;

the control system, responsive to receipt of the performance data from the peer communication devices, processes the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices, and transfers the performance file to each of the peer communication devices;

each of the peer communication devices, responsive to receipt of the performance file, processes the performance file to compare its performance to the performance of the other peer communication devices to detect a fault; and

responsive to detection of the fault, at least one of the peer communication devices processes the performance file to identify at least one recovery action, and performs the at least one recovery action to attempt to cure the fault.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The telecommunications system of claim 1 wherein the at least one peer communication device determines if the fault is cured by the at least one recovery action, generates a report of the fault if the fault is not cured by the at least one recovery action, and transfers the report of the fault to the control system.

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6. (Previously Presented) The telecommunications system of claim 5 wherein the control system, responsive to receipt of the report of the fault, identifies at least one recovery action, and performs the at least recovery action on the at least one peer communication device.

7. (Cancelled)

8. (Previously Presented) The telecommunications system of claim 1, wherein:

      each of the peer communication devices periodically transfers the performance data to the control system.

9. (Previously Presented) The telecommunications system of claim 1 wherein the performance data includes a performance grade for each of the peer communication devices.

10. (Previously Presented) The telecommunications system of claim 1 wherein the performance file includes a list of performance data for each of the peer communication devices.

11. (Previously Presented) A method of operating a telecommunication system to provide distributed system monitoring, wherein the telecommunication system comprises a plurality of peer communication devices coupled to a control system, the method comprising the steps of:

collecting performance data in each of the peer communication devices responsive to the peer communication devices handling telecommunications data,

transferring the performance data from each of the peer communication devices to the control system,

processing, in the control system, the performance data from each of the peer communication devices to generate a performance file that indicates the performance of each of the peer communication devices,

transferring the performance file from the control system to each of the peer communication devices,

processing the performance file in each of the peer communication devices to compare its performance to the performance of the other peer communication devices to detect a fault; and

responsive to detection of the fault, processing the performance file to identify at least one recovery action, and performing the at least one recovery action to attempt to cure the fault.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Previously Presented) The method of claim 11 further comprising the steps of:

determining if the fault is cured by the at least one recovery action,

generating a report of the fault if the fault is not cured by the at least one recovery action, and

transferring the report of the fault to the control system.

16. (Previously Presented) The method of claim 15 further comprising the steps of:

    responsive to receipt of the report of the fault in the control system, identifying at least one recovery action, and performing the at least one recovery action on one of the peer communication devices.

17. (Cancelled)

18. (Previously Presented) The method of claim 11 wherein the step of transferring the performance data from each of the peer communication devices to the control system comprises the step of:

    periodically transferring the performance data from each of the peer communication devices to the control system.

19. (Previously Presented) The method of claim 11 wherein the performance data includes a performance grade for each of the peer communication devices.

20. (Previously Presented) The method of claim 11 wherein the performance file includes a list of performance data for each of the peer communication devices.

xi.   EVIDENCE APPENDIX

        None.

x.   RELATED PROCEEDINGS APPENDIX

        None.

SUMMARY

     The Appellants argue that the Examiner's rejections of claims 1, 5-6, 8-11, 15-16, and 18-20 under 35 U.S.C. 103(a) are inadequate as a matter of law and should be reversed.

                                    Respectfully submitted,

Date: **4-1-2010**   **/BRETT BORNSEN/**

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